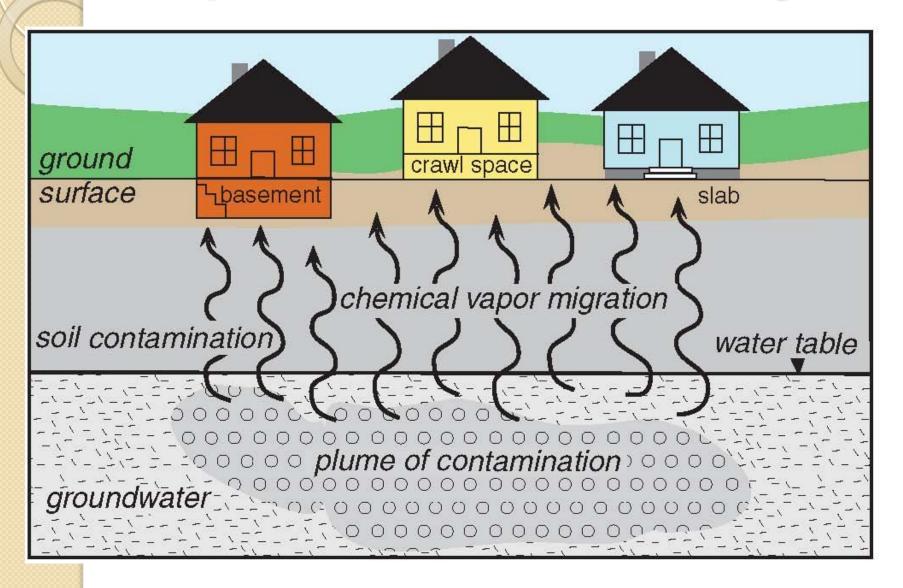


February 2012

Mathew Plate (for Janet Rosati)
US EPA

Ms. Rosati (415) 972-3165 (rosati.janet@epa.gov)

## Vapor Intrusion Pathway





#### **TCE**

Color Designation Based on Maximum Detection for Each Location Posted

- TCE Not Detected
  TCE Detected Below Residential SGHHSL
- TCE Detected at or Above Residential SGHHSL.

#### Sample Location

- TOE Concentration (up/m²) at 5 feet below ground surface
- 116 TCE Concentration (ug/m²) at 15 feet below ground surface

- Sample location symbol color is determind by highest energical result reported in sample from either 5 feet or 15 feet.
- below ground surface promise prince surroce.

  2) Some proposed locations were not needed for eampling.

  3) Validated results shown with numeric value and color coded number.

  4) TOE = Trichiorostherie.

  5) ND = Not Defected.

- S) Not Not Declared
   S) pgm<sup>2</sup> micrograms per cubic mater
   S) pgm<sup>3</sup> micrograms per cubic mater
   SOHHSL Soil Gas Human Health Screening Level
   TOE SGHHSL S20 ugm<sup>2</sup>
   \* sceeds assignited SGHHSL but below commercial SGHHSL



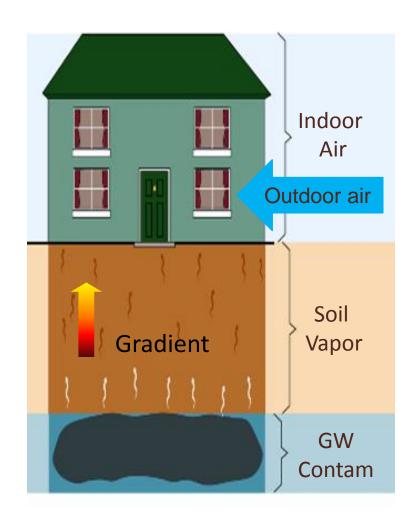


#### Figure 2

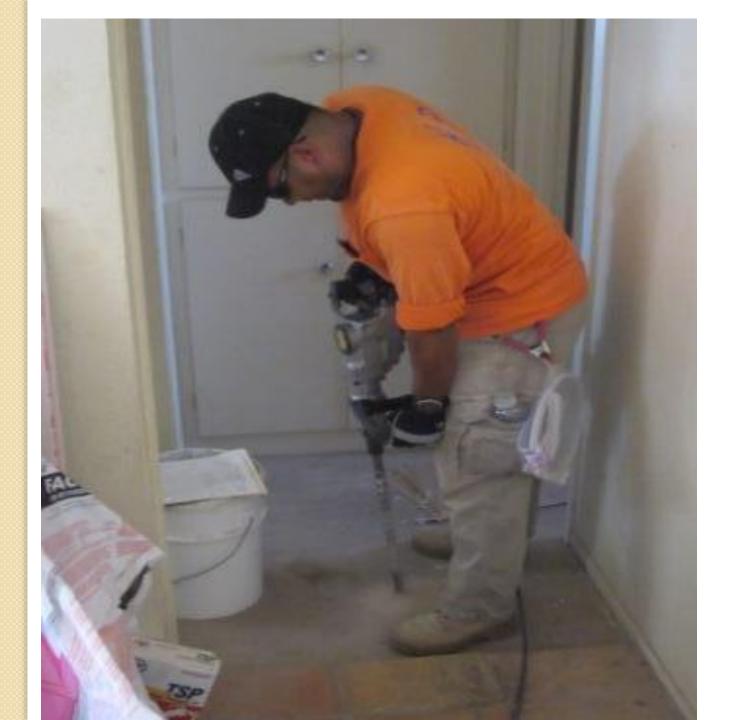
OU1 TCE Soil Vapor Results (ug/m3) 5 Feet and 15 Feet Below Ground Surface April through August 2011

### Soil Gas and Indoor Air

- Vapor intrusion = soil gas entering overlying buildings
- Questions to address:
  - Is vapor intrusion happening?
  - If so, are indoor air exposures of potential health concern?
  - Does weather impact the results
    - We will collect samples in both summer and winter









# Summary of Indoor air Sampling Program

- Sampled 39 residences, 5 commercial buildings and two schools representing areas where soil vapor exceeded screening levels
- Trichloroethylene (TCE) primary site related chemical found above the screening level
- Based on indoor air and sub-slab data 6 buildings will be pre-emptively mitigated with sub-slab depressurization systems

## **Example Sub-Slab Depressurization System**

Provides a
 difference in
 pressure between
 indoor air and sub slab gas that
 prevents vapors
 from entering the
 home

